Responses to Changed Condition Letter from Klamath Forest Alliance, and KS Wild

The Wild Rivers Ranger District Received a letter dated September 9th, 2018, and December 5th, 2018 from Klamath Forest Alliance (KFA), and Klamath-Siskiyou Wildlands Center (KS Wild) respectively, informing the District Ranger that due to the 2018 Taylor Creek Fire, conditions had changed in the project area. The following comments were taken from the letter, and responded to below:

The ecological conditions in the area encompassing the Upper Briggs Restoration Project Planning Area have drastically changed since the publication of the Environmental Assessment. The new information and changed ecological conditions associated with the 2018 Taylor Fire are significant in extent and were not considered in previous NEPA analysis. Based on this new information, we again urge you to reconsider units 2, 9, 23, and 21 from the forthcoming decision. (KFA, KS Wild)

Response: A soil burn severity analysis indicated that 22% of land within the overall fire perimeter burned at moderate to high severity, 49% low severity, and 29% very low or unburned. Within the project planning area, these numbers are 15% burned at moderate to high severity, 28% low severity, and 38% very low or unburned. Nineteen percent of the planning area was outside any fire perimeter. The 2018 fires within the planning area is determined to have been a "mixed severity fire". (EA Appendix A) A changed condition analysis was conducted by district specialists following the 2018 Taylor Creek Fire. It is available in Appendix A of the EA. The units listed are not ones that soil burn severity data shows as having high soil burn severity (EA Appendix A, page 296-297).

The new information brings into question the validity of the assumptions presented in the Upper Briggs Restoration Project EA. These invalid assumptions pertain to actual, rather than predicted fire effects in stands proposed for treatment. The Upper Briggs Restoration Project claims that forest fires in the stands proposed for treatment would be "catastrophic" or stand replacing in nature. These assumptions have been proven simplistic when reviewing the complexity of fire effects in the 2018 Taylor Fire, which was largely driven by fire weather, rather than fuel loading and/or canopy conditions. (KFA)

Response: There were a number of factors that influenced the outcome of the Taylor Creek Fire. The fire burned under an inversion (cool air trapped under smoke, with warmer air being kept above the smoke layer). Additionally, to reduce high severity fire in the Briggs project area, helicopters with ignition devices lit ridges, typically in the early evening. This reduces fire severity by backing fire down the slope with lower intensity (backing fire is generally considered the least intense manner in which a fire spreads). This action is a suppression effort that is not taken into account in the effects analysis in the EA (EA page 85). The fire regime indicated in the EA in the majority of the Briggs project area is a Fire Regime Condition Class 1, which has a fire frequency of 0-35 years, with the fire severity being low/mixed (EA page 86-87). Referring to the answer above, and EA Appendix A, the fire regime in the Briggs analysis indicated is consistent with the fire effects from the Taylor Creek Fire.

Most importantly, the new information also brings into questions the ability of the Rogue River Siskiyou National Forest to implement the treatments proposed in the Upper Briggs Restoration Project with the intended and analyzed results. Significant new information and changed environmental circumstances render the agency's ability to meet authorized canopy cover targets, live tree retention targets and northern spotted owl habitat designations, impossible. If

implemented as analyzed the Upper Briggs Restoration Project would fail to comply with canopy cover and large tree retention levels outlined in the EA. Fire induced mortality makes implementation of proposed treatments impossible due to changed environmental conditions. If implemented as analyzed the Upper Briggs Restoration Project would also likely exceed the effects analyzed in the Biological Opinion and in ESA Consultation. (KFA)

Response: A changed condition analysis was conducted following the 2018 Taylor Creek Fire. It is available in Appendix A of the EA. Units that experienced basal area loss were field reviewed. In some cases, commercial treatment will be dropped, but non-commercial treatment may still occur. (EA Appendix A page 10) Units with reduced treatment are listed in EA Appendix A page 9. All project design criteria and mitigation measures in Chapter 2 of the EA will be followed (DN/FONSI page 2). In a February 8, 2019 letter of concurrence, the Service concurred that the effects of the proposed action, along with the impacts of the wildfires and suppression activities will not exceed effects anticipated in the 2017 Opinion. (DN/FONSI, page 12)

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Canopy cover and large tree retention levels authorized cannot be met due to the effects of the 2018 Taylor Fire. Live canopy has been reduced in many units and large trees intended to sustain canopy conditions may have been killed during the fire. These large trees may be necessary to meet canopy cover and large tree retention targets in the Upper Briggs Restoration Project. (KFA)

Response: Units that experienced basal area loss were field reviewed. In some cases, commercial treatment will be dropped, but non-commercial treatment may still occur. (EA Appendix A page 305-311) Units with reduced treatment are listed in EA Appendix A page 305.

Likewise, trees targeted for removal in the Upper Briggs Restoration Project may have survived the 2018 Taylor and now create important components of the stands living canopy. Due to variable levels of fire induced mortality in both trees prescribed for removal and trees prescribed for retention, the authorized and intended effects on NSO habitat and stand structure cannot be achieved. Canopy cover and large tree retention levels cannot be met with any level of certainty following commercial logging treatments. This renders the assumptions in the Upper Briggs Restoration Project EA, Biological Opinion and ESA Consultation invalid due to significant changed environmental circumstances and new information not analyzed in the EA, pertaining to the 2018 Taylor Fire. (KFA, KS Wild)

Response: Effects to NSO sites, and Critical Habitat post fire are described in EA Appendix A, page 26-35. In summary, the 2018 fires reduced NRF levels within core areas, and home ranges below what they were in the consultation and all are now below threshold levels of NRF associated with NSO reproductive success. Proposed NRF downgrade would result in slightly lower NRF percentages (1-2 percent lower) within four home ranges (55, 228, Sam Brown and Secret Creek). This downgrade is associated with sites that have low relative habitat suitability such and treatments are focused on maintenance of pine/oak habitat or establishment of ridgeline fire management zones. This percent change in NRF for these home ranges is the same or lower than what was consulted on prior to the fires and is displayed in Table 11. In addition, treatments that maintain dispersal habitat outside of the FMZs and pine/oak habitats in these home ranges are expected to develop future NRF habitat because they are on sites with higher relative habitat suitability. (EA Appendix A, page 326)

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Cumulative effects

NEPA also requires the agency to assess the cumulative effects of its proposed action on the environment. 40 C.F.R. § 1508.7. Cumulative effects are defined as the impact resulting from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions. Id. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Id. The cumulative impact of the Upper Briggs Restoration Project was not analyzed or considered in the context of recent 2018 Taylor Fire and fire induced mortality in the planning area. (KFA)

Response: Cumulative effects as a result of the 2018 Taylor Creek Fire were considered as part of the changed condition analysis. They are discussed throughout EA Appendix A- Changed Condition Review due to Fire Effects.

The CEQ regulations require that action agencies prepare a supplemental NEPA analysis when a "major federal action" is proposed to occur and the initial NEPA document does not adequately discuss "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). (KFA)

Response: A changed condition analysis was conducted following the 2018 Taylor Creek Fire. It is available in Appendix A of the EA.

For an agency's decision to be considered reasonable, a Decision Notice and Finding of No Significant Impact (DN/FONSI) must contain sufficient evidence and analysis to show the decision is reasonably supported by the facts. The agency must show a rational connection between the facts found and the decision rendered. If the agency fails to consider important aspects of the problem in its EA, it is not reasonably supported by the facts because the facts have changed significantly since the time of publication. The authorization of the Upper Briggs Restoration Project as currently analyzed would be arbitrary and capricious because significant new circumstances regarding the 2018 Taylor Fire including fire induced mortality and fire effects was not incorporated into the effects analysis in the EA. (KFA)

Response: A changed condition analysis was conducted following the 2018 Taylor Creek Fire. It is available in Appendix A of the EA. It was determined that the Upper Briggs project collectively in consideration of the effects of the 2018 fires will not result in a significant effect on the human environment. This conclusion is based on consideration of the Council on Environmental Quality's criteria for significance[1] (40 CFR §1508.27), with regard to the context and the intensity of the impacts described in the EA, and on an understanding of the project, review of the project analysis, and consideration of public comments. (EA Appendix A, page 345)

Compliance with Biological Opinion

Numerous timber sale units in the Upper Briggs Restoration Project have been affected by the 2018 Taylor Fire. Fire induced mortality has killed many of the "leave" trees proposed for retention. Without the live canopy that these "leave" trees would represent, canopy cover retention levels analyzed in the EA and Biological Opinion could not be achieved. Thus, NSO management

[1] The draft Finding of No Significant Impact speaks to the findings as evaluated by the team.

designations could not be maintained at the levels proposed in the EA and Biological Opinion with any certainty.
Implementing the Upper Briggs Restoration Project based on current analysis would amount to knowingly exceeding the NSO impacts analyzed in the EA and Biological Opinion. It would also exceed the impacts under which USFWS consultation was assessed. Implementation of the Upper Briggs Restoration Project in light of the new information will create unanticipated NSO downgrades or removal. (KFA)

Response: In a February 8, 2019 letter of concurrence, the Service concurred that the effects of the proposed action, along with the impacts of the wildfires and suppression activities will not exceed effects anticipated in the 2017 Opinion. (DN/FONSI, page 12)

NSO Habitat Baseline
The new information and changed circumstances associated with the 2018 Taylor Fire has affected the current NSO habitat baseline by potentially reducing the available habitat. The habitat levels analyzed in the Upper Briggs Restoration Project EA and Biological Opinion have been altered by the 2018 Taylor Fire. (KFA)

Response: The NSO baseline conditions have been updated following the 2018 Taylor Creek Fire. That analysis is available beginning on page 324 of Appendix A of the EA.

Pacific Fisher Impacts:
NSO habitat is used as a surrogate for Pacific fisher habitat in the area. Thus, similar unanticipated impacts to Pacific fisher habitat would take place if the project is implemented as analyzed in the EA. The additional impacts associated with logging stands already affected by the 2018 Taylor Fire was not considered in NEPA analysis for the Upper Briggs Restoration Project. (KFA)

Impacts of the proposed action to Pacific fisher was updated in the BE Addendum and Changed Conditions Report (pp 24-26). PDC's have been added to the project to minimize potential impacts of disturbance during denning season which corresponds with the NSO seasonal restriction.

The RAT Assessment states "The Upper Briggs project is now in essence 'an island of mature habitat' not connected to any other quality mature habitat for not only red tree vole but also fisher (RF sensitive and proposed for listing under ESA) and a number of other species. Prescriptions for Upper Briggs should consider this and be adapted to fit better connectivity." We recommend that the Conservation Plan be modified to include remaining post-fire known RTV sites as high priority. Previously submitted mapped modifications include specific known sites on the valley floor as "high priority" in the RTV Plan. Retention of these sites would improve the RTV Plan. New information post-fire indicates these known sites in mature/old growth stands did not burn at high severity in the fire and are logical to include as high priority sites in the RTV Plan. Other known sites that remained intact post-fire should also be considered for high priority sites in the RTV Plan since they are likely to persist in future fires. (KS Wild)

The RTV Plan was revised to account for the changed condition in habitat connectivity and reserves approximately 75 percent of NFS lands in the Briggs Creek fifth-field watershed for RTV conservation. This includes expansion of some HPS and new HPS in proposed units that would be treated in compliance with RTV management recommendations. Other parts of the watershed where habitat connectivity is sparse are identified as areas that would require pre-disturbance surveys in suitable habitat prior to habitat disturbing activities. (RTV Plan and EA Appendix A)

The "Soil Burn Severity by Subwatershed" in the Burn Report indicates that 81.4% of the Upper Briggs Creek Subwatershed burned: 9,460 acres unburned or very low; 7,007 acres (28%) low severity; 1,908 acres (8%) moderate severity; and 1,679 acres (7%) high severity (Burned Area Report p. 2)1. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd601810.pdf We understand that the baseline conditions are being updated for decision making because of impacts of burning. The burning at various intensities over thousands of acres has resulted in substantial reductions of hazardous fuels described in the EA. The analysis regarding hazardous fuels should be updated accordingly. Statements in the EA about the effects of logging on soils need to be updated because soils have been damaged by the fire. Soil impacts would be much greater when logging on burned soils. The soil erosion hazard rating, erosion potential, sediment potential and debris flow potential are now greatly elevated from the EA baseline conditions (Burned Area Report p.4). (KS Wild)

Response: The BAER report looked at the entire fire area, not just the Briggs project area. The changed condition analysis documents that in areas of high severity, project design criteria will still be effective at mitigating adverse effects (EA Appendix A, page 343). In units with high severity, commercial treatments have been dropped, but non-commercial treatment will still take place (EA Appendix A, page 305, DN/FONSI page 4).

The Burn Report (pp. 14-17) identifies numerous fire or fire connected actions that will likely cause impacts to resources. For example, invasive species are likely to spread to lands disturbed by the fire and fire suppression actions (e.g. dozer lines). The Burn Report (p. 13-17) makes numerous references to roads and culverts being overwhelmed with sediment. Some of these roads are in the planning area. Treatments identified in the Burn Report (p.19-28) and BAER treatment map https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd601812.pdf will reduce some but not all fire related sediment impacts. Even with post fire treatments, some channels may be overwhelmed with chronic sediment and elevated turbidity. Can these issues be addressed in the Briggs Project? (KS Wild)

Response: The BAER report looked at the entire fire area, not just the Briggs project area. Application of the Upper Briggs project design and mitigation measures will still be effective to keep the overall risk of invasive species establishment to a moderate level. No changes to the project design and mitigation measures are needed for botanical resources; the design and mitigation measures can be found in the EA (pages 44, 45, and 46). (EA Appendix A, page 295)

The Hydrology Report p.5
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd601816.pdf) describes post fire hydrologic conditions:
"Hydrologic response following wildfire in the Taylor-Klondike burned area will include reduced interception and infiltration of precipitation, increased runoff and erosion, higher stream flow volumes for a given precipitation input, and a more rapid rise of stream and river levels compared with those of unburned conditions. Additionally, the probability of severe erosion, debris torrents, and hillslope failures is substantially higher, and will remain so for at least the next few years. Road-stream crossings and other drainage systems are particularly vulnerable to damage following wildfire. Culverts throughout the burned area lack the capacity and inlet protection to accommodate elevated peak flows and prevent inlet plugging. Water quality in streams that drain the burned area will be impaired during runoff events, particularly in the peak flow season of November to March. An initial flush of ash and fine sediment is expected during and following the

first large rain events of the fall season. Suspended sediment loading and turbidity levels in streams within and below the burned area will be elevated during runoff season until groundcover becomes re-established. Even after groundcover stabilizes burned area hillslopes, eroded fine sediment that is deposited in stream and river channels and floodplains in the next few years will continue to move through the system for many years to come. Large woody debris will likely accompany the initial flush of fine sediments and ash, with continual downstream delivery of large debris throughout the winter high flow season, likely peaking during the first month of high flows (November to December). Additionally, levels of some nutrients will likely be elevated in concert with higher turbidity and suspended load. Lastly, stream temperature is likely to increase relative to prefire conditions where shade has been lost. Riparian vegetation will recover in a relatively short period of time, but shading for larger channels from tall trees will take decades to recover. Changes in water quality can impact aquatic resources and habitat, as well as surface drinking water supplies."
These adverse hydrologic impacts need to be mitigated.

Response: The BAER report looked at the entire fire area, not just the Briggs project area. The changed condition analysis, available in Appendix A of the EA indicates that there will be no increase in peak flow from the proposed thinning activities in the Upper Briggs Project area. (EA Appendix A, page 8) The Upper Briggs project would continue to contribute toward maintaining and restoring the sediment regime of the project area through application of project design criteria and no-treatment areas within Riparian Reserves. (EA Appendix A, page 305)